Who's Who of the Opening Ceremony

On 3 July, Prof. Yang Kai, president of the Chinese Society of Geodesy, Photogrammetry and Cartography, declared the XXI ISPRS Congress open.

This event was reported by Chinese broadcaster CCTV and a number of national newspapers including China Daily and Business Daily.

The Vice-Minister of Land and Resources and Director General of the State Bureau of Surveying and Mapping of China, Mr Lu Xinshe, and ISPRS President Prof. Ian Dowman delivered opening speeches.

All ISPRS council members were in attendance: Secretary General Prof. Orhan Altan, Congress Director Prof. Chen Jun, First Vice-President Prof. John Trinder, Second Vice-President Dr. Manos Baltsavias, Treasurer Prof. Stan Morain. ISPRS honorary members were also present.

SBSM Deputy Directors Wang Chunfeng, Li Weisen, Min Yiren and Luo Lan attended the ceremony.

Chinese government officers attended the congress, including: Xu Guanhua, Chairman of the National Steering Committee of the Congress & Chairman of the Committee of Education, Science, Culture, Health and Sports, CPPCC, Weng Mengyong, Vice Minister of Transportation, Wang Tiehong, Chief Engineer of the Ministry of Housing and Urban and Rural Development, Cheng Donghong Secretary of Chinese Association of Science and Technology, Yuan Shuyou, Director General of Surveying and Mapping Bureau of the Army, Yin Chaomin, Deputy Director of the China Earthquake Administration, Yu Rucong, China Meteorological Administration, and Wang Fei, State Oceanic Administration, as well as representatives from the State Development and Reform Commission, Ministry of Education, Ministry of Science and Technology, Ministry of Civil Affairs, Ministry of Finance, Ministry of Land and Resources, State Bureau of Forestry, Legislative Affairs Office of the State Council, Chinese Academy of Engineering, National Foundation of Natural Sciences and the Bureau of Science and Industry for National Defense. Academicians in related fields also joined the event including Li Deren, Chen Shupeng, Chen Junyong, Ye Jia'an, Xu Houze, Tong Qingxi, Liu Jingnan, Liu Xianlin, Ning Jinsheng, Wang Renxiang, and Zhang Zuxun.

Directors of national mapping agencies, including Germany, Israel and Pakistan, and officials from British and Turkish embassies, also attended the ceremony.

Full House for First Plenary

Speakers at the first plenary session on Friday morning addressed a full house. Executive director and secretariat of the Group on Earth Observations (GEO), Jos Achache, presented his paper, Co-operation to Build a Global Earth Observation System of Systems (GEOSS). An initiative of GEO   an intergovernmental organisation with 74 members and 51 participating organisations   GEOSS will be composed of co-ordinated and sustained observation systems to provide easier and more open access to data.

Mr Juergen Dold, from Leica Geosystems in Switzerland, presented a paper on the evolution of LIDAR systems in the geospatial and surveying market.

Professor Li Deren of State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University, reported on the role of spatial information in the rapid emergency response to the Wenchuan earthquake. Deren described how photogrammetry, remote sensing and spatial information technologies were applied to disaster response operations including the co-ordination of rescue efforts, combating secondary disaster, damage assessment and reconstruction.

CONTENTS

Special Publications

Advances in Photogrammetry, Remote Sensing and Spatial Information Sciences: 2008 ISPRS Congress Book
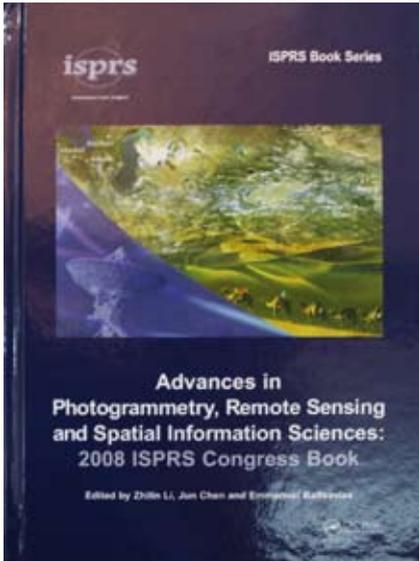
Published on the occasion of the XXI Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS) in Beijing, China, in 2008, *Advances in Photogrammetry, Remote Sensing and Spatial Information Sciences: 2008 ISPRS Congress Book* is a compilation of 34 contributions from 62 researchers active within the ISPRS. The book covers state-of-the-art developments in photogrammetry, remote sensing and spatial information sciences. It is divided into six parts:

• Introduction
• Sensors, Platforms and Date Acquisition Systems
• Data Processing and Analysis
• Data Modelling, Management and Visualisation
• Applications
• Education and Co-operation

Advances in Photogrammetry, Remote Sensing and Spatial Information Sciences: 2008 ISPRS Congress Book provides a comprehensive overview of the progress made in these areas since the XX ISPRS Congress held in 2004 in Istanbul, Turkey . The volume will be invaluable not only to scientists and researchers, but also university students and practitioners.

# Photogrammetry and Remote Sensing in China

Since its reform and opening up to the world, China has made great progress in photogrammetry, remote sensing and spatial information science. It has made advancements in socio-economic development, resource investigation, environmental protection, disaster prevention and reduction, national security and living standards. China has also been active in academic exchange and international cooperation. The book provides an overview in both Chinese and English of the country's major achievements in this field.

This book has nine chapters. Chapter 1 introduces the long history of surveying and mapping. Chapter 2 summarises civil applications of air-borne and space-borne remote sensing systems for Earth observation. Chapter 3 describes key technological achievements in analytical photogrammetry, digital photogrammetry, remote sensing image processing, digital mapping and data updating. Chapter 4 presents the research on spatial information science, such as multi-dimensional spatio-temporal data modelling, uncertainty in spatial data and analysis and GIS-based process analysis and simulation. Chapter 5 reviews key applications of photogrammetry and remote sensing in topographic mapping. Chapter 6 describes the industrialisation of mapping, remote sensing, GIS and satellite-based navigation.

An introduction is given to the scale, distribution, products, and services of photogrammetry and remote sensing. The education and international co-operation in this field are briefly summarised in Chapters 7 and 8. An outlook about the future developments in photogrammetry and remote sensing in China is given in Chapter 9.

This is a rich and informative book for domestic and foreign counterparts wanting to know about China's progress and accomplishments in peacefully applying spatial information technology.

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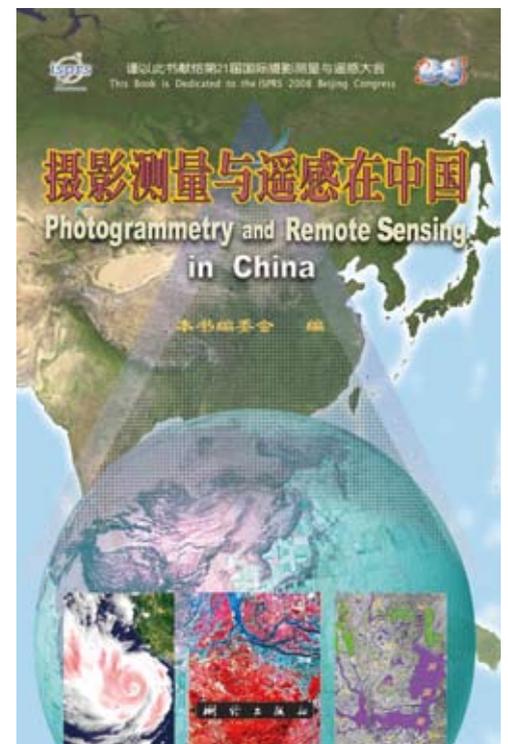
Recognising Gold in China

Professor Chris Gold became the inaugural winner of the Wang Zhizhuo Award at the Congress opening ceremony on 3 July.

"I've told many Chinese friends that winning this award is 'double happiness'," says Prof. Chris Gold, who became the inaugural recipient of the Wang Zhizhuo Award at the Congress opening ceremony on 3 July.

"I call it this because I've received recognition for my scientific work, and also because it was from the Chinese association. It is a very great honour to have a foreigner receive an award from a Chinese agency, particularly for me because I've had a strong love of China for many years."

Prof. Gold has been active for more than 30 years in the development of spatial data structures, spatial models of perception and adjacency, geo-informatics applications and algorithms.

"My main interest has been 'what is space?'," says Prof. Gold. "I don't mean stars and nebula, I mean how things relate in the space we live in. The other half is, how do you put this in a computer?"

Gold is known in the geo-informatics community for his work on spatial data structures, Voronoi diagrams, dynamic mapping and 3D modelling.

"The implications of our work will be in the next generation of GIS. One example of something we're working on is real time navigation with ship data that allows us to do collision avoidance, coastline navigation and chart projection onto the 3D model of the land and the sea. It's like a 'computer games' view of the real world.

"The biggest challenge is how to extract and represent data in a way that we can use to ask questions," says Gold. "GIS has numerous applications, but the underlying technologies are based on the paper map idea. Then in the computer games industry we have lots of beautiful 3D, but we really don't know what these objects and their properties are – we don't know the kinds of questions we want to ask in a computer decision-making system."

> ❝ *We don't know the kinds of questions we want to ask...*

Prof. Gold says he is very pleased to have the opportunity to return to China for the Congress.

"It's very special to see how much we are working together. It's very reassuring to see how many friends I have in China and how much genuine collaboration and friendship there really is."

The Wang Zhizhuo Award is sponsored by the Chinese Society of Geodesy, Photogrammetry and Cartography (CSGPC). It is awarded to a person who has made significant achievement or innovation in the spatial information sciences.

Congress Award

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![ISPRS logo - Information from imagery]

ISPRS 2008 Beijing Daily

Today's Highlights

5 July 2008 - Saturday

◆ **General Assembly 3**
   Time: 08:30-12:00
   Convention Hall No.1

◆ **YF-Opening Ceremony**
   Time: 08:30-10:00
   Room: (305C Conference Room)

◆ **YF-White Elephant Session**
   Time: 14:00-15:30
   Room: (305C Conference Room)

◆ **YF-Student Consortium Assembly**
   Time: 17:00-17:50
   Room: (305 Conference Room)

◆ **YF-Closing and Award Ceremony
   (YF Best Papers and Posters)**
   Time: 17:00-18:00
   Room: (305 Conference Room)

◆ **SE-5: Beijing Night Show**
   Date: Saturday, 5 July 2008
   Wednesday, 9 July 2008
   Time: 19:00-21:20
   Depart from BICC at 18:00
   Place: Beijing Night Show Theater
   Cost: RMB 750

Technical Commission Report

Technical Commission II: Theory and Concepts of Spatio-Temporal Data Handling and Information

Technical Commission II in its present form was introduced at the Istanbul Congress 2004 to express the increased focus of the ISPRS on GIS and geographic information science.

Together with Technical Commission IV, both commissions concentrate on the theoretical (TC II) and practical (TC IV) aspects of geo-information.

Technical Commission II comprises seven working groups and one inter-commission working group with TC IV.

The working groups address major issues in geo-information science. These include spatio-temporal modelling, spatial reasoning, analysis and data mining, multiple representations, visualisation, spatial decision support, system integration and interoperability, quality and uncertainty of spatial data and models, and 3D and dynamic data handling.

The penetration of GIS technology in an increasing number of areas leads us to believe we need more theory on spatial modelling, interoperability and visualisation. This is evident from the tremendous rise of services like Google Earth and Microsoft Virtual World. These services have a widespread impact on society and the way we deal with spatial information.

Could anyone imagine 10 years ago that we would be able to virtually visit any place on Earth? 3D visualisation is becoming more common, but there are many issues and challenges. Quality propagation through spatial analysis, spatial decision support with highly complex data, interoperability of heterogeneous systems and geo-sensor networks are several examples that pose interesting questions of ontology and data-handling.

Over the last four years the working groups of TC II have addressed many of these questions in symposia and workshops.

These issues were also considered at the TC II Symposium GICON 2006, which was organised as a joint event of Indian Society fo Remote Sensing, International Cartography Association and International Geographical Union.

Three volumes of proceedings were published – one for each society. One of the WG symposia resulted in Volume 5 of the ISPRS book series on Advances in Spatio-Temporal Analysis, edited by X. Tang, Y. Liu, J. Zhang and W. Kainz. Several of the WG officers wrote contributions to the 2008 ISPRS Congress Book. Our findings are also available in the congress proceedings.

After a thorough review, process papers have been selected for oral or poster presentation. Nearly 200 papers are published in the archives. M. Kokla, secretary of WG II/6, will receive the Best Paper by Young Authors award.

It is expected that under the new TCP, the commission will continue the work started in the first four years of strengthening the ISPRS in the field of geo-information science. It will continue to raise the profile of the ISPRS as a society that spans the whole range of spatial data handling and addresses the needs of modern society.

Wolfgang Kainz
President, Technical Commission II
Department of Geography and Regional Research
University of Vienna
AUSTRIA

Could anyone imagine 10 years ago that we would be able to virtually visit any place on Earth?
Image Source: Google Earth

Poster Session Now Open

Walking through the Great Wall of Knowledge

With over 1700 posters featured throughout the Congress, the poster session is a great place to find out about the many research projects, applications and case studies being done by scientists from around the world. Featuring more than 200 posters each day, the poster session is definitely something you don't want to miss!

The poster session is scheduled 4-10 July.

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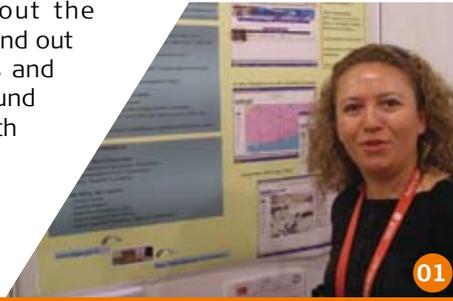
01. Metadata Portal for Map in Turkey

02. Use of GIS in Analysing Vehicle Emissions in Istanbul

03. Modelling of Species Geographic Distribution for Assessing Present Needs for the Ecological Network

04. New Absolute Radiometric Calibration Test Site

What's on the Menu

6 July 2008 - Sunday

◆ **Acrobatic Show**
   Time: 08:30-16:00
   Youth Forum Tour to the Great Wall
   Departure from Sun Hotel at 08:00
   Departure from BICC at 08:15

◆ **SE-3**
   Time: 19:15-20:15
   Room: (305C Conference Room)
   Departure from BICC at 18:00

Enjoying the Congress? Purchase your raffle tickets to support future ISPRS activities. Raffle tickets are on sale at the TIF Registration Booth on BICC Level 1.

Poster Session

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Programme Highlights

General Assembly

The first general assembly was held in the morning of 3 July.

Delegates were informed that, since the 2004 Congress, Nigeria, Zimbabwe and Senegal have been admitted as ordinary members. Colombia and Chinese Taipei have been admitted as associate members.

Candidates for hosting the next congress presented their proposals.

Candidates for technical commissions in 2008-2012 delivered their campaign speeches.

Nominations for Technical Commissions

1. Canada – Dr. Naser El-sheimy – Commission I
2. Hong Kong – John Shi – Commission II
3. Germany – Monika Sester – Commission II
4. France – Nicolas Paparoditis – Commission III
5. Japan – Prof. Ryosuke Shibasaki – Commission IV
6. U.S.A. – Prof. Marguerite Madden – Commission IV
7. China – Gong Jianya – Commission IV
8. U.K. – Jonathan Philip Mills – Commission V
9. Taiwan – Tian Yuan Shih – Commission VI
10. The Netherlands – Martien Molenaar – Commission VI
11. Austria - Wolfgang Wagner – Commission VII
12. Italy - Piero Boccardo – Commission VIII
13. Japan – Haruhisa Shimoda – Commission VIII
14. India – Jia Singh Parihar – Commission VIII

Program of the Day

◆ **TS WG IV/6 & ThS-8: Location Based Services**
Time: 08:30-10:00
Room: (Convention Hall No.2A)

◆ **TS SS-15: Future of Geographic Information Science**
Time: 08:30-10:00
Room: (Convention Hall No.2B)

◆ **TS WG VIII/2 (1): Public Health**
Time: 08:30-10:00
Room: (Convention Hall No.2C)

◆ **TS ICWG I/V: Autonomous Vehicle Navigation**
Time: 08:30-10:00
Room: (201A Conference Room)

◆ **TS WG II/2: Spatial Reasoning, Analysis, and Data Mining**
Time: 08:30-10:00
Room: (201B Conference Room)

◆ **TS WG I/2 (2): Full-waveform and Multi-pulse LiDAR**
Time: 08:30-10:00
Room: (307 Conference Room)

◆ **TS WG VIII/8: Polar and Alpine Research**
Time: 10:30-12:00
Room: (Convention Hall No.2A)

◆ **TS WG I/5 (1): Sensor Orientation of Optical Spaceborne Sensors**
Time: 10:30-12:00
Room: (Convention Hall No.2B)

◆ **TS ThS-9: Realtime and Incremental Updating of Core Databases**
Time: 10:30-12:00
Room: (Convention Hall No.2C)

◆ **TS WG VI/6: Special Interests Group "Technology Transfer Caravan"**
Time: 10:30-12:00
Room: (201A Conference Room)

◆ **TS WG IV/5 (1): Web-based Geo-information Services and Applications**
Time: 10:30-12:00
Room: (201B Conference Room)

◆ **TS WG II/7 (2): Quality of Spatio-temporal Data and Models**
Time: 10:30-12:00
Room: (307 Conference Room)

◆ **TS WG ICWG V/I: Integrated Systems for Mobile Mapping**
Time: 16:00-17:30
Roomzz (Convention Hall No.2A)

◆ **TS WG VIII/11 (1): Sustainable Forest and Landscape Management**
Time: 16:00-17:30
Room: (Convention Hall No.2B)

◆ **TS WG VIII/12 (1): Geological Mapping, Geomorphology and Geomorphometry**
Time: 16:00-17:30
Room: (Convention Hall No.2C)

◆ **TS WG VII/4 (1): Advanced Classification Techniques**
Time: 16:00-17:30
Room: (201A Conference Room)

◆ **TS ThS-18: Change Detection**
Time: 16:00-17:30
Room: (201B Conference Room)

◆ **TS SS-7: Global Monitoring for Environment and Security (GMES)**
Time: 16:00-17:30
Room: (201C Conference Room)

◆ **TS WG V/3 (1): Terrestrial Laser Scanning - Orientation**
Time: 16:00-17:30
Room: (307 Conference Room)

Tragic End to Indonesian Aerial Surveillance Mission

An Indonesian air force plane has crashed during an aerial surveillance mission near Jakarta.

All passengers were killed in a plane crash in Indonesia on the 28 June. The flight departed on an aerial surveillance mission to test new digital equipment.

A Casa N212-200 flight crashed near Mount Salak, 40km (60 miles) south of Jakarta on 26 June.

BBC News reported on 28 June that all 18 passengers were killed.

Among the deceased were Mochtar Mahendra Kumar of India, Kwong Ping Anthoni of Britain, Tan Hook of Singapore, Susika Murdhayanti of Indonesia and employees from Singapore-based geo-information technology provider, Credent Technology. Major Murdhayanti was completing a Master of GIS at the University of Melbourne.

According to reports, the flight departed Jakarta on an aerial surveillance mission to test new digital surveillance equipment.

Officials believe that heavy fog may have caused the accident.

Alumni Gathering

A large delegation of the International Institute for Geo-Information Science and Earth Observation (ITC), Enschede, the Netherlands, is attending the ISPRS Congress in Beijing. Some 30 staff and PhD students are present. We are also represented at booths 307 and 308 of the exhibition. On Tuesday 8 July, an ITC alumni gathering will be held at the Western Restaurant, Celebrity International Grand Hotel in Beijing. ITC alumni are invited to pick up their invitation at the ITC booth.
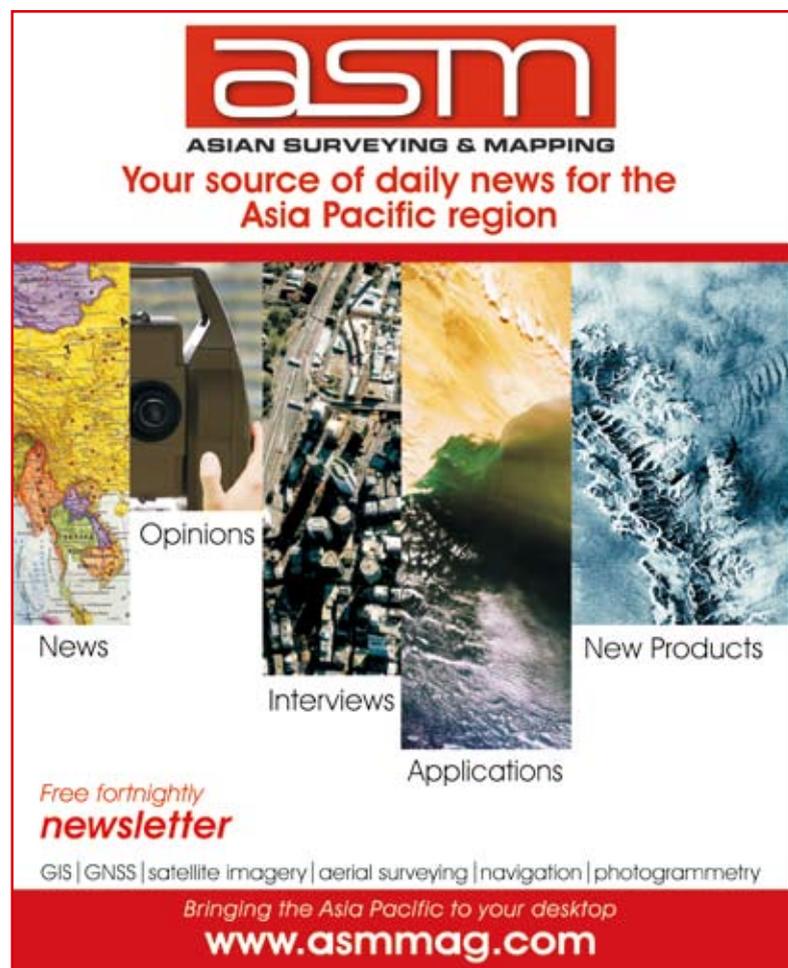
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Social Calendar

Plans for the Weekend

5 - 9 July 2008

◆ **SE-5: Beijing Night Show**

Date: Saturday, 5 July 2008
Wednesday, 9 July 2008
Time: 19:00-21:20
Depart from BICC at 18:00
Place: Beijing Night Show Theatre
Cost: RMB 750

Beijing Night Show is the first of its kind to offer visitors to Beijing a rare opportunity to enjoy classical Chinese art performances and traditional Chinese cuisine. The show features a wide range of Chinese artistic performances, from traditional art and music to dancing, opera, acrobatics and traditional costume shows.

◆ **SE-6: Laoshe Tea House**

Date: Saturday, 5 July 2008
Tuesday, 8 July 2008
Time: 19:50-21:20
Depart from BICC at 18:00
(Dinner at Fangshan Restaurant)
Place: Laoshe Tea House
Cost: RMB 330

Located just opposite to the Tian'anmen Square, Laoshe Tea House was founded in 1988, named after renowned artist Mr. Laoshe. It offers a Beijing-style antiqued atmosphere where the audience watches drama and musical performances while enjoying tea and snacks. Performances include unique traditional music recitals, folk dancing, acrobatics and opera spectacles.

◆ **SE-3: Acrobatic Show**

Date: Sunday, 6 July 2008
Wednesday, 9 July 2008
Time: 19:15-20:15
Depart from BICC at 18:00
(meal box to be provided)
Place: Tian Di Theater
Cost: RMB 240

The Chinese Acrobatic Troupes have travelled to many countries and amazed audiences everywhere. To watch Chinese acrobatics is an experience at once fanciful and inspirational.

Kodak Moments...

Spatially disoriented!

Catching up on emails, eh?

Bei Jing Huan Ying Ni!
(Beijing Welcomes You!)

Information overload...

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